SEQUENCE LISTING

<110> Applied Research Systems ARS Holding N.V.

<120> NOVEL CC-CHEMOKINE BINDING TICK PROTEINS

<130> WO956

<150> EP03104973.7
<151> 2003-12-24

<160> 10

<170> PatentIn version 3.2

<210> 1
<211> 744
<212> DNA
<213> ectromelia virus

<400> 1
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cttcagcaat cattcgcatc ctcgtgtacg gaagaagaaa acaaccatca tatgggaatc 120

gatgttatta tcaaagtcac caagcaagac caaacaccga ctaatgataa gatttgtcaa 180

tcagtaaccg aagttacaga gtctgaagac gatggggtat ccgaagaagt cgtaaaagga 240

gatcccacca cttattacac tgtcgtcggt ggaggtctga gaatgaactt tggattcacc 300

aaatgtcctc agattaaatc catctcagaa tccgctgatg gaaacacagt gaatgctcgg 360

ttgtctagcg tctctccaat gtacggcatt gaatctccag ccatcactca tgaagaagct 420

cttgctatga tcaacgactg tgcggtgtct atcaatatca aatgtagtga agaagagaaa 480

gacagcaaca tcaagaccca tccagtactc gggtctaaca tctctcataa gaaagtgagg 540

tacgaagata tcatcggttc aacgatcgtc gatataaaat gtgtcaagga tctagagttt 600

agcgttcgta tcggagacat gtgcaaggaa gcatctgaac ttgaagtcaa ggatggattc 660

aagtatatcg acggatcggt atctgaaggt gcaaccgatg atacttcact catcgattca 720

acaaaactca aagcgtgtgt ctga 744

<210> 2
<211> 247
<212> PRT
<213> ectromelia virus

<400> 2

Met Lys Gln Tyr Ile Val Leu Ala Cys Ile Cys Leu Ala Ala Ala Ala
1 5 10 15

Ile Pro Thr Ser Leu Gln Gln Ser Phe Ala Ser Ser Cys Thr Glu Glu
20 25 30

Glu Asn Asn His His Met Gly Ile Asp Val Ile Ile Lys Val Thr Lys
35 40 45

Gln Asp Gln Thr Pro Thr Asn Asp Lys Ile Cys Gln Ser Val Thr Glu
50 55 60

Val Thr Glu Ser Glu Asp Asp Gly Val Ser Glu Glu Val Val Lys Gly
65 70 75 80

Asp Pro Thr Thr Tyr Tyr Thr Val Val Gly Gly Gly Leu Arg Met Asn
85 90 95

Phe Gly Phe Thr Lys Cys Pro Gln Ile Lys Ser Ile Ser Glu Ser Ala
100 105 110

Asp Gly Asn Thr Val Asn Ala Arg Leu Ser Ser Val Ser Pro Met Tyr
115 120 125

Gly Ile Glu Ser Pro Ala Ile Thr His Glu Glu Ala Leu Ala Met Ile
130 135 140

Asn Asp Cys Ala Val Ser Ile Asn Ile Lys Cys Ser Glu Glu Glu Lys
145 150 155 160

Asp Ser Asn Ile Lys Thr His Pro Val Leu Gly Ser Asn Ile Ser His
165 170 175

Lys Lys Val Arg Tyr Glu Asp Ile Ile Gly Ser Thr Ile Val Asp Ile
180 185 190

Lys Cys Val Lys Asp Leu Glu Phe Ser Val Arg Ile Gly Asp Met Cys
195 200 205

Lys Glu Ala Ser Glu Leu Glu Val Lys Asp Gly Phe Lys Tyr Ile Asp
210 215 220

Gly Ser Val Ser Glu Gly Ala Thr Asp Asp Thr Ser Leu Ile Asp Ser
225 230 235 240

Thr Lys Leu Lys Ala Cys Val
245

<210> 3
<211> 585
<212> DNA

<213> Rhipicephalus sanguineus

<400> 3
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atgcgcactt tcggggcttc tcttttcgtt ctcctcgcga ttagtgtcgc ttactgtgac 120

gtccaagagc gcggccatac ttacgtgacc aaaaatgtga cggtcgaaaa cggtgcctgc 180

gtgtttgaac gcaacgtcat tccggatggt gaaaccaaag cactgaacag cccatgcgtc 240

atttccacat gctatgcagc tgaccgtaaa gtgaactcga ctctctgccc gaacttcgga 300

gttgcggagg gctgccatgt ggagtggacc cccgatggtg aatacccgaa ctgctgcccg 360

aagcatgtgt gccctacggc ccctgttact tcttaatcgc atcacatctg cgaaaatgaa 420

acgtcgagac attcttcttt atgccttaag aaattaaact gcaacgtccg caaaaataca 480

tccccgcttc aaatacgaac aaaatgcagg atcaaatgct attaggtttc atgctgagtg 540

caagctaaaa taaacaactg aatcagcgtt taaaaaaaaa aaaaa 585

<210> 4
<211> 111
<212> PRT
<213> Rhipicephalus sanguineus

<400> 4

Met Arg Thr Phe Gly Ala Ser Leu Phe Val Leu Leu Ala Ile Ser Val
1 5 10 15

Ala Tyr Cys Asp Val Gln Glu Arg Gly His Thr Tyr Val Thr Lys Asn
20 25 30

Val Thr Val Glu Asn Gly Ala Cys Val Phe Glu Arg Asn Val Ile Pro
35 40 45

Asp Gly Glu Thr Lys Ala Leu Asn Ser Pro Cys Val Ile Ser Thr Cys
50 55 60

Tyr Ala Ala Asp Arg Lys Val Asn Ser Thr Leu Cys Pro Asn Phe Gly
65 70 75 80

Val Ala Glu Gly Cys His Val Glu Trp Thr Pro Asp Gly Glu Tyr Pro
85 90 95

Asn Cys Cys Pro Lys His Val Cys Pro Thr Ala Pro Val Thr Ser
100 105 110

<210> 5
<211> 420

<212> DNA
<213> Rhipicephalus sanguineus

<400> 5
gacgtccaag agcgcggcca tacttacgtg accaaaaatg tgacggtcga aaacggtgcc 60

tgcgtgtttg aacgcaacgt cattccggat ggtgaaacca aagcactgaa cagcccatgc 120

gtcatttcca catgctatgc agctgaccgt aaagtgaact cgactctctg cccgaacttc 180

ggagttgcgg agggctgcca tgtggagtgg acccccgatg gtgaataccc gaactgctgc 240

ccgaagcatg tgtgccctac ggcccctgtt acttcttaat cgcatcacat ctgcgaaaat 300

gaaacgtcga gacattcttc tttatgcctt aagaaattaa actgcaacgt ccgcaaaaat 360

acatccccgc ttcaaatacg aacaaaatgc aggatcaaat gctattaggt ttcatgctga 420

<210> 6
<211> 92
<212> PRT
<213> Rhipicephalus sanguineus

<400> 6

Asp Val Gln Glu Arg Gly His Thr Tyr Val Thr Lys Asn Val Thr Val
1 5 10 15

Glu Asn Gly Ala Cys Val Phe Glu Arg Asn Val Ile Pro Asp Gly Glu
20 25 30

Thr Lys Ala Leu Asn Ser Pro Cys Val Ile Ser Thr Cys Tyr Ala Ala
35 40 45

Asp Arg Lys Val Asn Ser Thr Leu Cys Pro Asn Phe Gly Val Ala Glu
50 55 60

Gly Cys His Val Glu Trp Thr Pro Asp Gly Glu Tyr Pro Asn Cys Cys
65 70 75 80

Pro Lys His Val Cys Pro Thr Ala Pro Val Thr Ser
85 90

<210> 7
<211> 515
<212> DNA
<213> Amblyomma variegatum

<400> 7
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tgcgtgcgct cgttgcttta gcctgtgtcg tagtcagtgt tgcggtagtc atcggcgaca 120

tccaggaaca tggccactcc tacttgaaga ggaatgtgac tatagagaac ggtgcctgca 180

tctatgagcg caacacactt cctgatggtg aaaccaaggc actccacgac ccctgcgtca 240

ttgcaacctg ctacgctgaa aggcgcgaag tgaatgccac cctgtgccca aacttcggtg 300

tggatcctgg ttgtagggtg cagtggaccc ccgacggcat ctatccagaa tgctgcccga 360

aacaagtgtg cgatggcaca aactgagtcg aatgcatctc ttttgcaaat gcctgtttcg 420

agctgccacg tccaaataca ctgatgactc caagttactc agccggaaaa ttcactttcc 480

gtaaacaggt ttaagattca ataaacattt ctgaa 515

<210> 8
<211> 108
<212> PRT
<213> Amblyomma variegatum

<400> 8

Met Arg Ala Leu Val Ala Leu Ala Cys Val Val Val Ser Val Ala Val
1 5 10 15

Val Ile Gly Asp Ile Gln Glu His Gly His Ser Tyr Leu Lys Arg Asn
20 25 30

Val Thr Ile Glu Asn Gly Ala Cys Ile Tyr Glu Arg Asn Thr Leu Pro
35 40 45

Asp Gly Glu Thr Lys Ala Leu His Asp Pro Cys Val Ile Ala Thr Cys
50 55 60

Tyr Ala Glu Arg Arg Glu Val Asn Ala Thr Leu Cys Pro Asn Phe Gly
65 70 75 80

Val Asp Pro Gly Cys Arg Val Gln Trp Thr Pro Asp Gly Ile Tyr Pro
85 90 95

Glu Cys Cys Pro Lys Gln Val Cys Asp Gly Thr Asn
100 105

<210> 9
<211> 396
<212> DNA
<213> Ixodes scapularis

<400> 9
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gccgctaatc aaagccaccc ttatggagtt tcatttaata acggtacatg tacgtaccga 120

aatataacgc tgagagatgg agactctgaa ccttttcaat acccatgtga atattggaat 180

tgcaatgtta cagcaagaac actaactatt gaggggtgcg gtgttccacg atacggaagt 240

tgcctgtacg tgcacaatta taatttctac tggcctcttt gctgtcgcat gagtcgtctc 300

tgttgaaaca attaactaat ttaccttcac ttctatcaga acactttgct ggtaaataaa 360

aaaagaaaac aacaaaaaaa aaaaaaaaaa aaaaaa 396

<210> 10
<211> 101
<212> PRT
<213> Ixodes scapularis

<400> 10

Met Arg Ser Ile Val Leu Trp Ala Leu Ile Ala Leu Gly Gly Val Pro
1 5 10 15

Leu Leu Met Gly Ala Ala Asn Gln Ser His Pro Tyr Gly Val Ser Phe
20 25 30

Asn Asn Gly Thr Cys Thr Tyr Arg Asn Ile Thr Leu Arg Asp Gly Asp
35 40 45

Ser Glu Pro Phe Gln Tyr Pro Cys Glu Tyr Trp Asn Cys Asn Val Thr
50 55 60

Ala Arg Thr Leu Thr Ile Glu Gly Cys Gly Val Pro Arg Tyr Gly Ser
65 70 75 80

Cys Leu Tyr Val His Asn Tyr Asn Phe Tyr Trp Pro Leu Cys Cys Arg
85 90 95

Met Ser Arg Leu Cys
100